

## **Jigsaw Activity on Computing Educators Project Information**

Originally developed by Sarah Barras, January 2011  
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**Description of Activity:** In this activity students split into small groups (2-3 students per group) and each group becomes an expert on one of the Computing Educators on the CEOHP website. Students are required to view all documents and watch and listen to all interviews and video clips. After reviewing the information each group prepares a 2-3 minute presentation on the Computing Educator they studied. They create a visual aid using Microsoft PowerPoint or Microsoft Publisher to help them present the information.

**Background:** A “jigsaw activity” is a teaching technique that divides a normal-sized class into groups of four to six students, each of which is given a list of subtopics to research. In each group, students are assigned a "specialty", which they research apart from the jigsaw group in collaboration with the “experts” in the same specialty in the other jigsaw groups. Later, the jigsaw groups reconvene and teach one another about their specialties. The strategy encourages listening, engagement, interaction, peer teaching, and cooperation by giving each member of the group an essential part to play. Both individual and group accountability are built into the process.

For more information on jigsaw activities, see

- <http://www.jigsaw.org/>
- [http://en.wikipedia.org/wiki/Jigsaw\\_\(teaching\\_technique\)](http://en.wikipedia.org/wiki/Jigsaw_(teaching_technique))
- <http://www.ion.uillinois.edu/resources/otai/Jigsaw.asp>

**Grade Level:** Grades 9-12 (about 14-18 years old)

**Courses:** Digital Communication Tools, Computer Applications, Advanced Computer Applications, Information Technology, or other related courses.

**Required resources:**

- Computers with access to the Internet
- A word processing tools for taking notes
- A slide show / visual aid presentation tool such as Microsoft PowerPoint or Microsoft Publisher. Note: Students should already understand how to use these programs. This project could be used to assess use of those programs.

**Timeframe:** Six or seven 50-minute class periods

**Objectives:** Students will be able to:

- Analyze materials to extract interesting facts and examples about a specific Computing Educator
- Select and organize information that is pertinent to share with other students
- Present information to the class in a well-organized slide show / visual aid.

**Standards: From the Texas Essential Knowledge and Skills (TEKS,**  
<http://ritter.tea.state.tx.us/rules/tac/chapter126/index.html>)

(4) Information acquisition. The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to:

- (A) Use strategies to obtain print and digital information from a variety of electronic resources including, but not limited to, reference software, databases, and libraries of images, citing the source.

(5) Information acquisition. The student acquires electronic information in a variety of formats, with appropriate supervision. The student is expected to:

- (A) Acquire information in electronic formats including text, audio, video, and graphics, citing the source; and  
(B) Demonstrate the ability to import and export elements from one program to another.

(6) Information acquisition. The student evaluates the acquired electronic information. The student is expected to:

- (A) Identify and employ a method to evaluate the information; and  
(B) Demonstrate skill in testing the accuracy and validity of the information.

### **Teacher Instructions**

#### **Day 1: Viewing the Computing Educators Oral History Project Webpage**

- Divide students into groups of 2-3. Have students get into groups and explain the entire project, including the student instructions. In this class period, students become familiar with the CEOHP website they will use for their research. [www.ceohp.org](http://www.ceohp.org)
- Select one of the Computing Educators to demonstrate where students can find the information that they will need to use and how they will use it.
- Give students time to familiarize themselves with the website and determine which of the Computing Educators (currently 24 of them) they prefer.
- Each group submits 2-3 different Computing Educators. They may prioritize and should motivate in 2-5 sentences each of their choices (what led them to choose this Computing Educator?)
- To ensure that each group is assigned a different educator, the final assignment of Computing Educators to groups can be determined by the teacher or by challenging the student groups to determine a fair allocation.

#### **Day 2 and Day 3: Researching Computing Educators**

- Student groups spend the next two class periods gathering information from the CEOHP website. Guide students to the interviewees section on the right side of the webpage.
- They are required to read, view, and listen to all information on their chosen Computing Educator. Students take notes and turn in all notes at the end of the project. The notes can be organized in an outline format, should indicate the specific source, and should be produced using a word-processing program.
- Student groups should divide responsibility for researching the information. For example, one student may go through the entire audio interview while another student reads and gathers information, such as viewing the video clips, notable quotes, word clouds, and other information.

#### **Day 4 and Day 5: Preparing the Presentation**

- By now, each group will be an expert on their Computing Educator. They will use the information they have gathered to prepare a 2-3 minute presentation on their chosen Computing Educator. They will create a slide show / visual aid.
- Students must analyze the information that they have gathered and determine they wish to share with the class. The visual aid should be brief, neat, clean, and organized, with relevant information.

#### **Day 6 (and Day 7 if needed): Presentations on Computing Educators**

- The number of class periods devoted to the presentations will depend on the number of student groups.
- Prepare a sign-up sheet and have groups sign up to present.
- For additional practice and feedback on the presentations:
  - Individual students take hand-written notes with observations about the content of the presentations.
  - At the end of each presentation, there can be class-wide discussion/question section.

### **Student Instructions**

As groups you are going to become experts on one of the Computing Educators on the Computing Educators Oral History Project website ([ceohp.org](http://ceohp.org)). You will study your Computing Educator by reading information on the website, listening to and reading the interview, and watching any video clips on your educator. As your group reviews this information you must create notes using a word processor; your group will use these notes as the basis for a presentation about your Computing Educator for the entire class. You will turn in the notes at the end of this project. Your group will create a slide show / visual aid for a 2-3 minute presentation in either Microsoft PowerPoint or Microsoft Publisher.

#### **Day 1: Viewing the Computing Educators Oral History Project Webpage**

Go to [www.ceohp.org](http://www.ceohp.org) and look around the page, clicking and viewing several different interviewees on the right side of the page. Your group must choose 2-3 people as possibilities as the topic for your group. Tell your teacher your 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> choices; your goal is to find one that another group has not chosen yet. Motivate each of your group's choices in 2-5 sentences (what led you to choose this Computing Educator?)

Once you know your Computing Educator, you are ready to start Day 2.

#### **Day 2 and Day 3: Researching a Computing Educator**

Your group will spend two class periods researching your Computing Educator. You may split up the research, for example, where one person listens to the audio interview and takes notes while another member of the group views and reads the video clips, notable quotes, word clouds, and other information. You must take notes that will help your group prepare the presentation. You are required to turn in your notes as part of the project.

#### **Day 4 and Day 5: Prepare Presentation**

- Your group will share with each other all information you have gathered. Use this information to prepare a 2-3 minute presentation on your chosen educator. Create a slide show / visual aid using either Microsoft PowerPoint or Microsoft Publisher
- Your group must work together to analyze the information that you have gathered and determine you wish to share with the class. The slide show / visual aid should not contain an abundance of information; it should be neat, clean, and organized. Your group will organize the information on your slide show / visual aid and explain it to the class while presenting.
- All students must take part in presenting to the class, so as part of your preparation decide on the order of the speakers in your group.

#### **Day 6 and Day 7: Present to Class**

- All groups will make their 2-3 minute presentations to the class. Print copies of the slide show / visual aid for the teacher and for each group.

## Jigsaw Activity on Computing Educators Assessment Form

Names of group members: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

<i>Performance Indicators</i>	<i>Yes</i> ✓	<i>No</i> ✓	<i>Comments</i>
<b>Day 1— Viewing the CEOHP Website</b>			
Viewed CEOHP and several different Computing Educators			
Discussed with group 2-3 Computing Educators they wanted to know more about			
<b>Day 2 and Day 3— Research</b>			
Viewed and listened to all information regarding their Computing Educator			
Took adequate notes to prepare for presentation			
Worked effectively as a team to gather appropriate information			
<b>Day 4 and Day 5— Presentation Preparation</b>			
Used prior knowledge of PowerPoint or Publisher to create presentation			
Created a presentation to showcase their specific Computing Educator			
<b>Day 6 and Day 7— Presentations</b>			
Showed expertise on Computing Educator			
Listened attentively to all presentations			
Took adequate notes on other groups' presentations			
Asked relevant questions			
<b>Work Habits Observation</b>			
Completed project in reasonable amount of time			
Remained on task			
Worked well with group			